REMARKS

Claims 1-23 are all the claims presently pending in the application.

It is noted that Applicant specifically states that no amendment to any claim herein, if any, should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Applicant gratefully acknowledges the Examiner's indication on page 19 of the Office Action that claims 4-6, 8-10, 15, 16, and 22 are <u>allowable</u> if rewritten in independent format. However, Applicant declines to rewrite these claims at this time, since it is believed that all claims are allowable in view of the prior art currently of record.

The Examiner objects to claims 1, 3, 7, 11, and 20 for various reasons and for the "it is possible" terminology in various claims. Applicant does not agree that such changes are necessary but has attempted to expedite prosecution by incorporating Examiner Ryman's helpful suggestions.

It is noted, however, that Applicant disagrees with the position of the Examiner that the latest claim modifications require additional wording in the limitations before the preamble wording changes have patentable weight. That is, as explained in line 17 on page 2 of the specification, Applicant submits that, to one having ordinary skill in the art, the term "selection/synthesis" inherently conveys the meaning of calculation by the RNC. The previous preamble claim amendments were merely for purpose of focusing the analysis on this concept of the "selection/synthesis" processing in the RNC. That is, from the perspective of this description on page 2, the original claim terminology "selection/synthesis gain" was indeed adequate by itself to distinguish from the prior art rejection previously of record. The changes to the preamble merely attempted to highlight the significance of this original terminology, for the benefit of the Examiner's evaluation. Therefore, contrary to the Examiner's position, Applicant maintains that the recent preamble wording changes of the previous claim amendments do not require additional wording changes in order to have patentable weight for the preamble description.

Claims 11 and 13-18 stand rejected under 35 USC §101 as allegedly directed to non-statutory subject matter.

Claims 1-3, 7, 11-14, 17-21, and 23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (APA), further in view of Douzono, et al.

(U.S. Patent No. 5,574,983), and further in view of Chheda, et al. (U.S. Patent No. 6,515,975).

These rejections are respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

As described in, for example, claim 1, the claimed invention is directed to a transmit power control method in a CDMA mobile communication system during a selection/ synthesis processing in a Radio Network Controller (RNC) of an up receive from each of connected base transceiver stations (BTSs). A checking step checks whether one or more base transceiver stations (BTSs) are connected. In a calculating step, when a result of the checking step shows that two or more BTSs are connected to a specific mobile station, CH receive SIRs (Signal to Interference Ratios) corresponding to the connected BTSs are selected, using a predetermined selection criterion for selecting CH receive SIRs (Signal to Interference Ratios) corresponding to certain ones of the connected BTSs, and making a calculation by using values of the selected SIRs, and a calculation by using the selected values is made. In a reference value changing step, the value of a reference value Sref is changed according to a result of the calculation.

When the result of the checking step shows that only one BTS is connected, the reference value Sref is set to an upper limit in an upper limit setting step. In a reporting step, the changed reference value Sref is reported to all the connected BTSs. It is possible to decide the reference value Sref in response to a variation in selection/synthesis gain due to an increase or a decrease of the number of connected BTSs.

As explained in the specification, the present invention provides a method to change, at a high speed, the reference SIR used for reference in a high-speed closed loop control of an up link in a transmit power control method in a CDMA mobile communication system.

The conventional methods discussed, beginning at line 20 of page 2 of the specification, for this loop control is based on measurement of the frame error rate. Using this method takes time to achieve an optimal value, resulting in excessive transmit power and user interference.

As explained beginning at line 5 of page 12, the claimed invention, on the other hand, permits a rapid change of the reference SIR, relative to the time required in the conventional methods, thereby reducing these problems of excessive transmit power and interference in the

system. As indicated by the underlined portions of the above description of the present invention, the method of the present invention is <u>entirely different in concept</u> from a method based on the FER.

II. THE REJECTION FOR NON-STATUTORY SUBJECT MATTER

The Examiner alleges that claims 11 and 13-18 are directed to non-statutory subject matter unless the transmission of the output signal described in claim 12 is incorporated into claim 11. Applicant respectfully disagrees.

The method of claim 11 is intended to provide coverage for the method of the present invention as implemented in a controller without having the limitation that the transmitter included in the independent claim. Applicant submits that such method is indeed statutory simply because, in the words of the rejection itself, it has "... a practical application."

That is, in the wording of the claim that is not mentioned in the analysis of this rejection, there is clearly defined a technological environment demonstrating "... a practical application", since a CDMA mobile communication system is not only a concrete technological system, but also a very specific type of communication system. Therefore, this claim 11 clearly demonstrates an inherently practical application directed toward a specific communication environment and technique.

Moreover, it is pointed out that, to one having ordinary skill in the arts, the steps described in the claim limitations are clearly executed on a computer or other electronic device, such that each step could actually be physically measured, given correct instruments.

Therefore, contrary to the Examiner's characterization, these steps are indeed clearly physically embodied and clearly, therefore, inherently <u>not</u> an abstract idea.

However, although not considered necessary, in an effort to expedite prosecution, Applicant has added the claim limitation that identifies the outputting of a signal and, particularly in view of the discussion above traversing the Examiner's characterization that a mere abstract idea is described by this claim, respectfully requests that the Examiner reconsider and withdraw this rejection.

III. THE PRIOR ART REJECTION

The Examiner alleges that APA, as modified by Douzono, and then further modified

by Chheda, renders obvious the present invention as defined by claims 1-3, 7, 11-14, 17-21, and 23.

Applicant respectfully disagrees and submits that the analysis currently of record demonstrates improper hindsight and fails to meet the initial burden of a *prima facie* rejection.

The Examiner alleges that APA describes some of the steps of the claimed invention, except that the Examiner concedes that APA fails to teach or suggest various other steps. To overcome these allegedly missing steps, the Examiner relies upon Douzono and Chheda to systematically reconstruct the claimed invention.

Applicant submits that this systematic reconstruction is merely improper hindsight and is precluded by the "as a whole" inquiry of an obviousness rejection, as described in the holding of *Stratoflex, Inc., v. Aeroquip* Corp., 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983), as described in MPEP §2141.02: "*In determining whether the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious.*"

Applicant further submits that the evaluation currently of record improperly stops in the description of APA without recognizing that APA <u>already achieves</u> a similar result of the present invention <u>by using another method</u>, as clearly described beginning at line 20 of page 2, the point in the specification at which the description of APA in the evaluation conveniently stops. Applicant submits that the method described in the claimed invention is <u>entirely different</u> from the conventional method using FER.

Therefore, Applicant submits that, if the Examiner wishes to rely upon APA as the <u>primary</u> reference, the <u>initial burden</u> of a *prima facie* obviousness rejection is <u>not</u> the systematic reconstruction of the claimed invention based on finding elements in secondary references that are then <u>applied out-of-context from that of the secondary reference</u> to a <u>partial</u> description of APA. Rather, a proper evaluation requires that the <u>existing method that is described as being used in APA be modified</u>. The rejection currently of record makes no attempt to <u>modify/substitute the APA current method</u> described beginning at line 20 on page 2 and, therefore, fails to meet the initial burden of a *prima facie* rejection.

That is, as explained beginning at line 20 on page 2, the APA selection/synthesis processing in the RNC for reference SIR is a method based on calculating the frame error rate (FER), which method Applicant has recognized as being relatively slow. The present

invention overcomes this problem by providing a much faster method that is based on the number of BTSs connected to a mobile station. This new method is not based in any way on FER and is, therefore, an entirely different concept from the conventional method.

As Applicant's previous amendment explained, the methods in these two secondary references, Douzono and Chheda, are not related to selection/synthesis processing in the RNC. Therefore, the Examiner's initial burden requires that the Examiner provide a reasonable motivation to use one or more of these methods from two secondary references that are not related to RNC selection/synthesis processing as somehow obvious to be used to modify the existing RNC selection/synthesis processing based on FER.

In contrast, the evaluation currently of record merely isolates, in the entirely different context of these two secondary references, the alleged differences from the claimed invention and then attempts to justify how these differences would be obvious even though the methods are not even related to RNC selection/synthesis processing, let alone a processing based on FER. The motivations of the rejection currently of record to modify APA make no attempt to modify the FER method described as used by APA. Rather, the motivations of record merely describe the result the Examiner considers would be achieved if a partial description of APA were to incorporate these isolated methods. Applicant submits that this evaluation is quite different from that of modifying the conventional FER-based method, particularly when it is recognized that the method of the present invention is entirely different even in concept from the FER-based method.

On pages 17 and 18 of the previous amendment, Applicant pointed out:

> Likewise, Applicant submits that secondary reference Douzono also does not relate to "selection/synthesis processing", as executed in the RNC and whose result is then broadcast to the appropriate base stations, as can be clearly demonstrated in the description in lines 17-29 of column 8. Rather, the base station itself merely sets its transmission power in accordance with the number of base stations attached to the mobile station. This mechanism in each base station is not based on receiving a target SIR from the RNC, as calculated during "selection/synthesis processing" in the RNC and broadcast to the base station from the RNC.
>
> Finally, Applicant submits that the only reference in the rejection currently of record that is reasonably related to a processing that is even arguably executed above the lowest level of a base station system hierarchy is secondary reference Chheda.
>
> However, even this processing in Chheda provides a method quite different from that described by the plain meaning of the language in the independent claims, since it teaches that all base stations connected to the mobile station during a soft handoff should have the same transmission power (e.g., step 60 in Figure 2), as determined by detecting which base stations involved in the handoff are outside a threshold amount of deviation of output power from the base station having the best

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Eb/No (e.g., steps 54 and 56). This technique of imposing a <u>same transmission power</u> in various base stations is a different concept from that of the present invention, wherein a <u>reference value Sref is broadcast to the base stations.</u>

Specifically, unlike the result of Chheda, in the method of the present invention, each base station will still control its own transmission power in accordance with its closed power control loop with the mobile station and the unique irregularities in the transmission path between the mobile station and the respective base stations. The present invention provides a <u>rapid method to update the Sref that traditionally is provided by the "selection/synthesis processing" in the RNC</u>. Simply imposing a different transmission power level to all base stations is a <u>different mechanism</u> and is <u>not</u> equivalent to the mechanism of providing a more rapidly calculated Sref of an existing "selection/synthesis processing".

A second mechanism in Chheda of changing the step size of FPC and RPC, as described in the paragraph beginning at line 56 of column 6 and a third mechanism of directly adjusting FPC and RPC are likewise entirely different mechanisms from that of changing Sref by modifying the normal "selection/synthesis processing" based upon the number of attached stations.

Because of the failure of the rejection currently of record to <u>modify</u> the existing FER-based method used in APA, Applicant submits that the Examiner's <u>initial burden has not been met</u> and there is no need to address the remainder of the rejection at this time.

Moreover, Applicant submits that, in order to <u>properly</u> evaluate the present invention, as based on APA being the primary reference, a proper motivation to modify the existing FER-based method of APA would have to <u>reasonably</u> justify why one having ordinary skill in the art <u>would even want to consider the methods</u> used in a context in these secondary references different from that of selection/synthesis processing in the RNC for potential use in <u>modifying the conventional FER-based method</u>, particularly when there is no suggestion in either APA or either of these secondary references that the relatively slow FER-based method <u>should be or could be speeded up</u> by taking an entirely different approach from that of the FER.

Therefore, Applicant submits that there are elements of the claimed invention that are not taught or suggested by APA, Douzono, or Chheba, and the Examiner is respectfully requested to withdraw this rejection.

III.   FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-23, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in
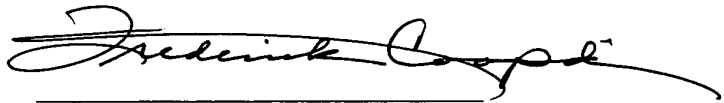
condition for allowance.   The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a <u>telephonic or personal interview</u>.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 4/28/06

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